



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D
<i>* : Required Field</i>			

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-12-09
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG MD Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STP24N60DM2	TLDZ*FQ6HB61	A	64BA	2016-12-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10-9.1-4.5	3	THROUGH HOLE	
Comment	TO 220 AB NON ISOL			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	FALSE
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-20th June 2016				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TLD2*FQ6H861					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	11.478	mg	supplier	die	Silicon (Si)	7440-21-3		11.022	mg	960275	5802
				supplier	metallization	Aluminium (Al)	7429-90-5		0.219	mg	19078	115
				supplier	Passivation	Silicon Nitride	12033-89-5		0.052	mg	4530	27
				supplier	Passivation	Silicon Oxide	7631-86-9		0.078	mg	6795	41
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	436	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.075	mg	6534	39
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.027	mg	2352	14
Leadframe	Copper & its alloys	1253.535	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	998278	658619
				supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	1000	659
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	300	198
				supplier	metallization	Nickel (Ni)	7440-02-0		0.490	mg	390	258
				supplier	metallization	Phosphorus (P)	12185-10-3		0.040	mg	32	21
Soft solder	Solder	10.339	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.873	mg	954928	5196
				supplier	solder	Silver (Ag)	7440-22-4		0.259	mg	25051	136
				supplier	solder	Tin (Sn)	7440-31-5		0.207	mg	20021	109
Bonding wires	Other inorganic materials	0.735	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.732	mg	995918	386
				supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	4082	2
Encapsulation	Other Organic Materials	617.551	mg	supplier	mold compound	Silica, vitreous	60676-86-0		537.269	mg	870000	282773
				supplier	mold compound	Epoxy resin	25068-38-6		61.755	mg	100000	32503
				supplier	mold compound	Phenol resin	29690-82-2		15.439	mg	25000	8126
				supplier	mold compound	Carbon Black	1333-86-4		3.088	mg	5000	1625
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348